

What is claimed is:

1. An analyzing system for analyzing medical samples comprising:

at least one independent single analyzer each of said single analyzers are provided for determining one sample parameter or one sample parameter group,

a computer-supported central unit having an input/output unit,

wherein said single analyzers are coupled in a first position, i.e., a charging position, to said central unit, and

wherein said single analyzers are designed so as to be removable from said charging position for use in a second position, i.e., a measuring position.

2. An analyzing system according to claim 1, wherein said measuring position is a bedside measuring position.
3. An analyzing system according to claim 1, wherein a bus system is provided for establishing releasable contact between each of said single analyzers as well as for establishing releasable contact between said single analyzers and said central unit in said charging position.
4. An analyzing system according to claim 3, wherein said bus system is provided with a data bus to establish a data link between said single analyzers and said central unit.
5. An analyzing system according to claim 3, wherein said bus system is provided with a fluid bus for exchange of

TOP SECRET 64560

washing, calibrating, and quality control solutions between said single analyzers and said central unit.

6. An analyzing system according to claim 3, wherein said bus system is provided with an energy supply bus.
7. An analyzing system according to any claim 3, wherein said bus system is provided with a sample bus for exchange of sample fluids between said single analyzers and said central unit.
8. An analyzing system according to claim 3, wherein said bus system is provided with docking stations for docking said single analyzers, each of said docking stations includes releasable plug-in and docking connections for at least one of data, energy, fluid and sample transport.
9. An analyzing system according to claim 8, wherein said docking stations are coupled to each other and to said central unit, establishing releasable plug-in and docking connections for at least one of data, energy, fluid and sample transport.
10. An analyzing system according to claim 8, wherein all of said docking stations and docking sites of said single analyzers are of uniform type.
11. An analyzing system according to claim 3, wherein said bus system is provided with a cable or tube connection for each of said single analyzers, leading from a socket at said central unit to a socket at each of said single analyzers, for at least one of data, energy, fluid and sample transport.
12. An analyzing system according to claim 1, wherein said single analyzers are provided for measuring at least one

parameter of a group consisting of blood gases with pH, electrolytes, metabolites, CO-oximetry, hematology, coagulation, and immunology.

13. An analyzing system according to claim 1, wherein said central unit is provided with an analyzer for measuring at least one parameter or parameter group of said medical sample to be analyzed.
14. An analyzing system according to claim 1, wherein said central unit is provided with control and maintenance facilities for each of said single analyzers.
15. An analyzing system according to claim 1, wherein said central unit is provided with supply tanks for at least one fluid of a group consisting of washing, calibrating, and quality control media, and a waste container for exhausted samples and washing, calibrating and quality control media.
16. An analyzing system according to claim 1, wherein said central unit is provided with a connection for remote data transmission.
17. An analyzing system according to claim 16, wherein said remote data transmission is an intranet connection.
18. An analyzing system according to claim 16, wherein said remote data transmission is an internet connection.
19. An analyzing system according to claim 1, used for analysis of body fluids.
20. An analyzing system according to claim 16, wherein said central unit comprises:

a device for automatic recording of information on operating materials and supplies,

a device for automatically calculating an estimated frequency of analysis from past frequencies of use of said analyzing system, or an input unit for entering a desired frequency of analysis, and

a device for calculating said operating materials and supplies required per unit of time in dependence of data on said operating materials and supplies as well as said frequency of analysis,

wherein said device for calculating is connected to said connection for remote data transmission for automated transmission of data concerning product ordering, service, and maintenance.

21. An analyzing system according to claim 20, wherein said device for automatic recording of information is used for recording type and maximum useful life of said operating materials used, as well as types, expiry dates, and quantities of said supplies used.
22. An analyzing system according to claim 1, wherein said central unit is provided with a data link to a laboratory information system LIS.
23. An analyzing system according to claim 1, wherein said central unit is provided with a data link to a hospital information system HIS.
24. An analyzing system according to claim 1, wherein said central unit is provided with a data link to further laboratory systems LS.

25. An analyzing system according to claim 1, wherein said central unit and each of said single analyzers have transmitter/receiver systems for wireless data transfer.
26. An analyzing system according to claim 25, wherein said data transfer is effected by means of wireless technology in the 2.4 GHz range, utilizing a license-free ISM band.